

SECTION III.—FORECASTS.

FORECASTS AND WARNINGS FOR JUNE, 1915.

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[Dated: U. S. Weather Bureau, Washington, D. C., July 15, 1915.]

June, from a forecasting point of view, is one of the most interesting months of the year, and June, 1915, proved no exception to the rule. It provided a number of features that marked it as exceptional, viz, the relatively large number of cyclones and anticyclones (lows and highs) that prevailed. Fifteen lows and 12 highs were sufficiently well defined to be plotted on Charts II and III, respectively. These totals are practically the same as are usually experienced in a winter or spring month, and the movement at times was as rapid and definite as that of winter. It was a case of forecasting in a summer month with winter movement of the highs and lows.

Highs.—As may be seen from Chart II, nearly all of the highs were first observed along the Washington and Oregon coasts or in the Canadian Northwest, the single exception being No. II, which first appeared over the Gulf of St. Lawrence with barometer level of 30.38 inches. It maintained its position over the Canadian maritime provinces about two days. Highs first appearing as this one did belong to a small group that is observed mostly in the spring season. These highs are associated with a marked fall in temperature over the North Atlantic States, and occasionally the fall in temperature extends into the South Atlantic States. The appearance of a high in the region mentioned so late in the season is unusual. High No. VI has a remarkable track, having passed from the Pacific to the Atlantic in a little more than three days, and being twice reenforced on its way, first in the upper lake region when the barometer level increased to

30.30 inches, and again over Maine and Nova Scotia, when pressure reached the unusually high level for the summer of 30.40 inches.

Lows.—The large number of lows plotted in June was made up of two groups, viz, primaries having their apparent origin in Alberta; and secondaries, the latter developing mostly to the west of the Continental Divide in Wyoming, Colorado, Utah, and Arizona—see Chart III.

The development of lows in the Southwest and their subsequent movement to the Northeast is probably that feature which determines the character of the weather of the month in the Great Plains States. If lows develop and their movement is as indicated, rains for the needs of agriculture will be plentiful; indeed, if the movement is any way persistent or recurrent, far too much water falls and destructive floods are caused. Sometimes, as in 1903, the movement begins in the latter part of May, and much rain falls by reason of the slow drift of one or more barometric depressions. In 1908, another wet June, but three depressions contributed the surplus water which fell upon the Plains States in that month. During the current month the number of Southwest lows was not only large, but they succeeded one another quickly. The resulting floods are described in Section IV.

Warnings of high winds.—Warnings were issued in connection with low No. I, when it was off the coast of the South Atlantic States, June 2-3; high winds continued for several days off the Virginia Capes. An easterly gale of 64 miles per hour was registered at Cape Henry on June 3.

High shifting winds of short duration prevailed in the lake region on the 18th in connection with low No. X. Other high winds that occurred were due to thunderstorms.